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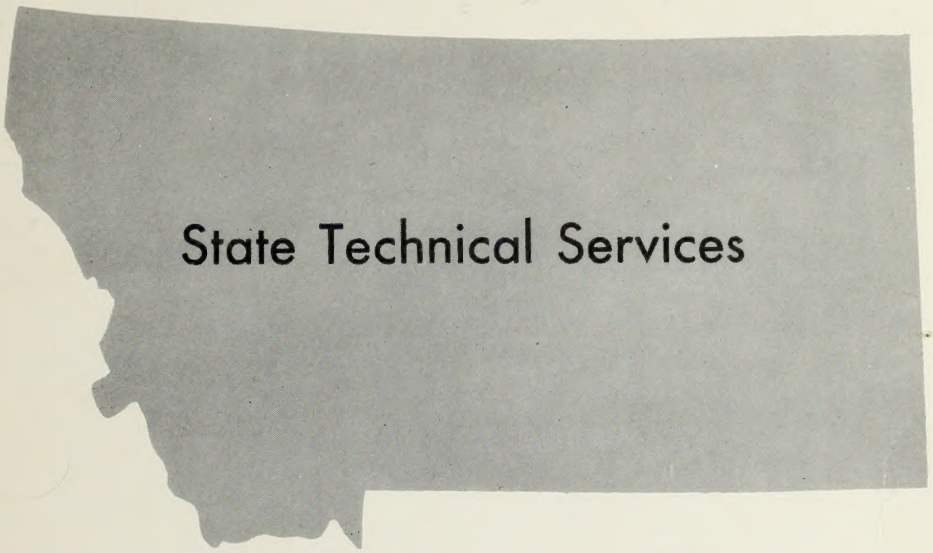

Revised
Five Year Plan

For Submission to

OFFICE OF
STATE TECHNICAL SERVICES

JUNE 1967

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State Technical Services
Office of the Director

UNIVERSITY OF MONTANA
Bureau of Business & Economic Research
Missoula, Montana 59801

8-8-67

August 3, 1967

Mr. Sam Chapman, Director
Montana State Planning Board
Helena, Montana 59601

Dear Sam:

I am enclosing a copy of our Five-Year State Technical Services Plan. I think you will be particularly interested in the information on pages 15-30. In my opinion the ideas expressed there represent the major goals for State Technical Services in Montana and the Rocky Mountain Region.

I would appreciate your comments and opinions.

Sincerely yours,

Pat Bragg

Patricia P. Bragg
Director

PPB:crm
Enclosure

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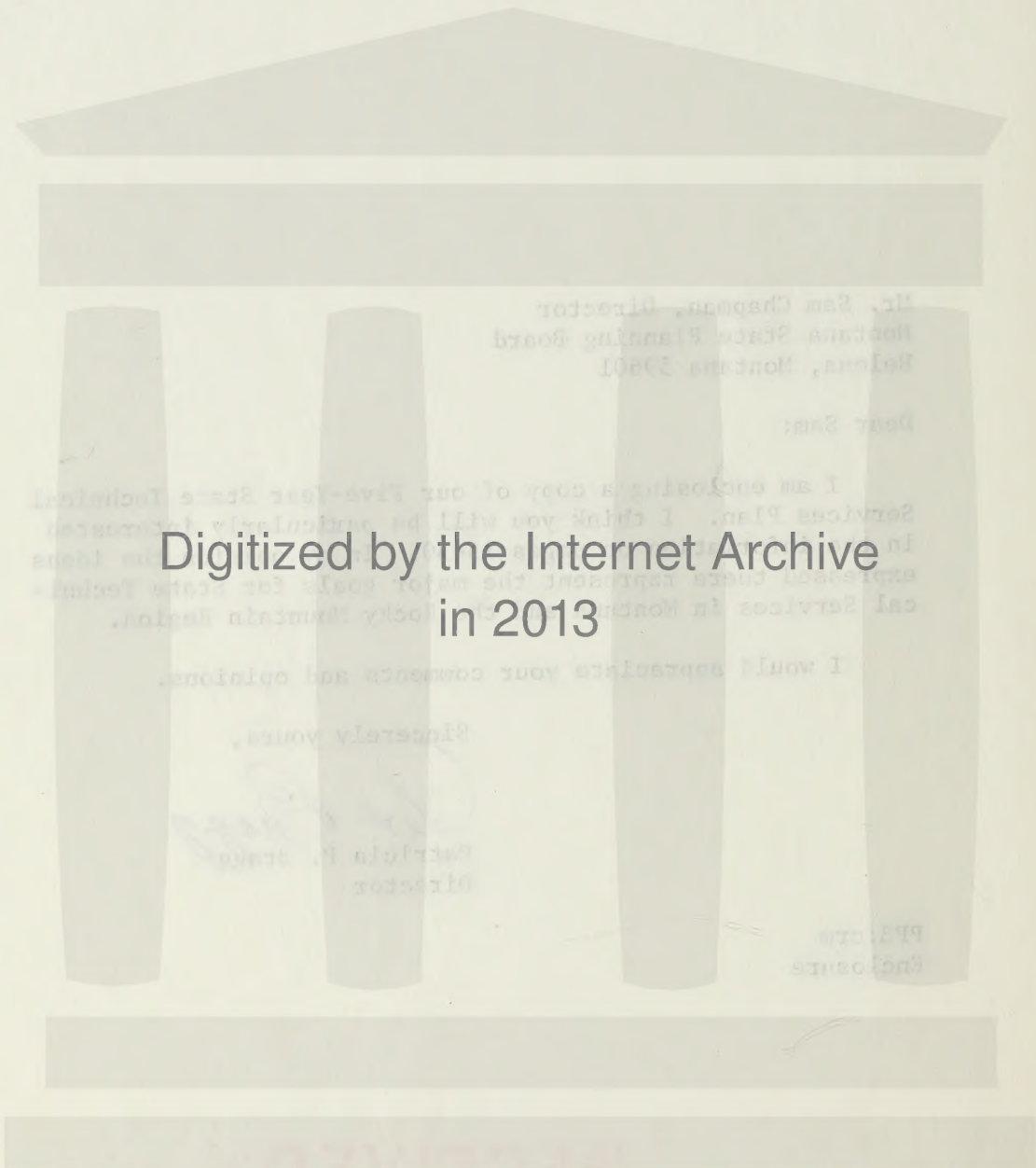

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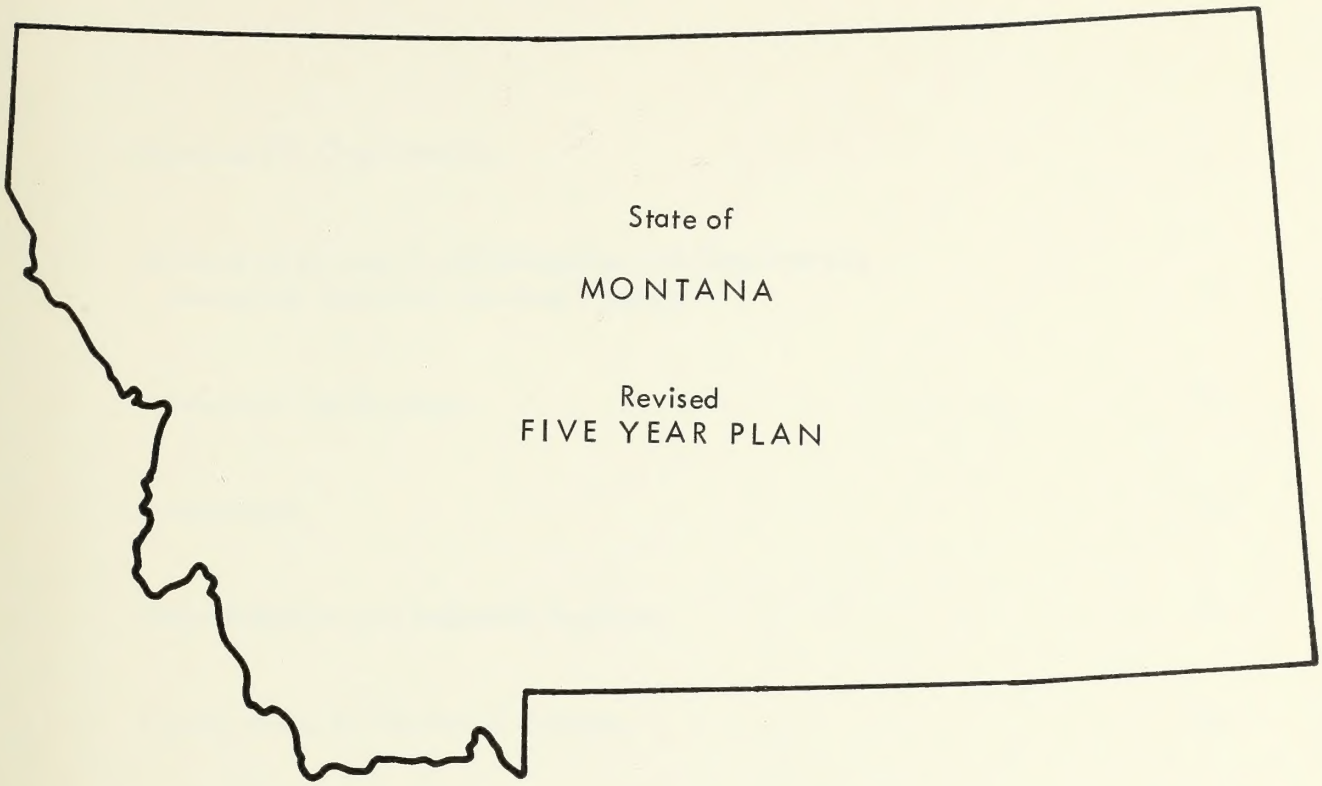

State of

MONTANA

Revised
FIVE YEAR PLAN

for consideration under the

STATE TECHNICAL SERVICES ACT OF 1965

submitted by the Designated Agency

Bureau of Business and Economic Research
School of Business Administration
University of Montana
Missoula

June 1967

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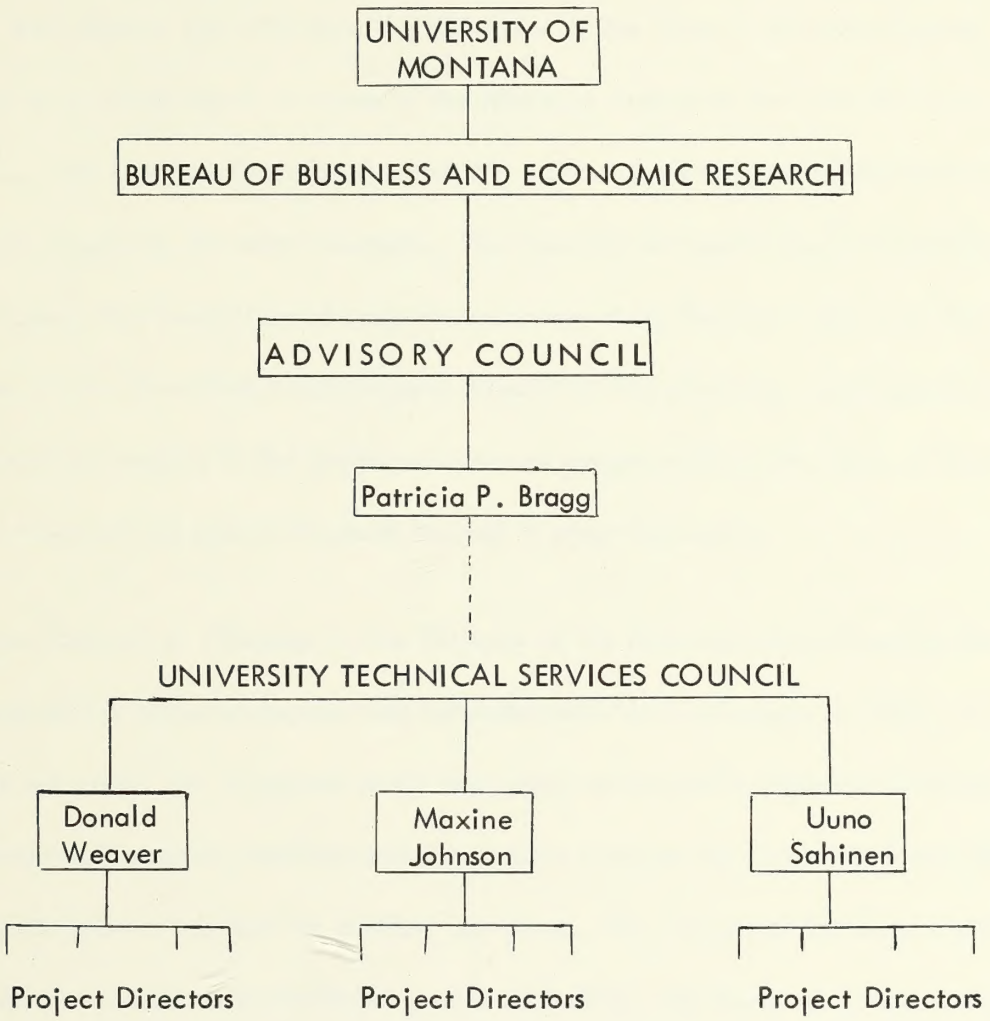
I. MONTANA STS ORGANIZATION



II. METHODS TO BE USED IN ADMINISTERING AND COORDINATING MONTANA'S TECHNICAL SERVICES PROGRAM

A. MONTANA TECHNICAL SERVICES ADVISORY COUNCIL

In compliance with the requirements set forth in the State Technical Services Act of 1965 (Public Law 89-182), the Governor of the State of Montana has appointed twelve individuals to serve as the Montana Technical Services Advisory Council. The individuals were selected in a manner so as to provide representation of broad community and state interests. The Council will assist the participating institutions in the evaluation of programs proposed under the Act. None of the members of the council shall participate directly in the planning, administration, or substantive conduct of the technical services program within the State of Montana. A brief biographical sketch for each member is presented below.

Mr. Samuel J. Chapman is the Director of the Montana State Planning Board. He received his bachelor degree from Intermountain Union College in 1936. During the last ten years, Mr. Chapman spent four years as the public relations director for the Anaconda Company, and two years as a sales manager for House of Glass; he has been in his present position for the last four years. Mr. Chapman has been actively involved in a number of professional groups including: the Rocky Mountain States Economic Development Council, the American Industrial Development Council, the Mid-Continent Research and Development Council, and the Regional Export Expansion Council.

Mr. Clyde A. Cromwell, plant manager for the Farmers Union Central Exchange, graduated from the University of Colorado in 1925. He worked as a superintendent for the Independent Refining Company for six years before he became superintendent of the Farmers Union Central Exchange. Mr. Cromwell has been in his present position for seven years. In addition to his work experience, he has served in various capacities on the following professional organizations: the Foundation of Montana Private Colleges, the Governor's Committee on Higher Education, and the Governor's Committee on Air Pollution.

Mr. Thomas Haines, a graduate from the University of Montana in 1924, is manager of the Montana State Food Distributors Association. His work experience includes: manager of the Retail Grocers Association, Editor and Publisher of Montana Food Distributor, member of the Montana State Legislature, and Director of Transwestern Life Insurance Company.

Mr. George Hammond is a graduate of Missoula County High School and is presently the executive director of the State, County, and Municipal Employees Union. Before his promotion to his present position, Mr. Hammond worked for the Montana Highway Commission for thirty years. In addition, he is a past president of the Chamber of Commerce in Wolf Point, Montana.

Mr. Stanley M. Lane, plant manager for American Smelting and Refining Company, received his B.S. in metallurgy from M.I.T. in 1935. Mr. Lane joined American Smelting and Refining Company in 1935. He has been an active board member in a number of professional groups including: the Helena National Forest Advisory Board, the Industrial Development Center Board, and the board of directors for Home Building and Loan Association.

Mr. Paul N. Matteucci graduated from the University of Idaho in 1929, and after twelve years experience with Super Save Food and Drug he was promoted from manager to president in 1944. Mr. Matteucci is a member of the National Association Chain Drugstores, a director of Montana Bank in Great Falls, and a past president of the Great Falls Chamber of Commerce.

Mr. John H. Morrison, Sr. received his civil engineering degree from Montana State University in 1931; he is president of Morrison-Maierle, Inc. He had extensive work experience with the Montana Highway Department before joining Morrison-Maierle, Inc. as president in 1945. Mr. Morrison is very active in a number of professional activities a few of which include: past director of the Consulting Engineers Council, chairman of the Water Resources Committee, and chairman of the Professional Engineering Board.

Mr. James O'Connell, a graduate of Carroll College in 1949, joined Eddy Bakeries Company upon graduation, and is presently Vice President in charge of purchasing. He is a member of the Junior Chamber of Commerce.

Mr. Edward P. Shea, a 1952 graduate geologist from Montana Tech, was chief geologist for the Anaconda Company's Montana operations until his recent retirement. Mr. Shea joined the Anaconda company in 1924 and held the position of chief geologist since 1958. Throughout his career, Mr. Shea has been actively involved in such organizations as the Western Governor's Mining Advisory Council, the Montana Coal Resources Research Council, and the Idaho Mining and the Northwest Mining Associations.

Mr. Leland J. Walker, a 1944 graduate in civil engineering from Iowa State University, is the president of the Northern Testing Laboratory. Mr. Walker had extensive experience in civil engineering before joining Northern Testing Laboratories in 1958. His participation in professional and honorary organizations includes: the American Institute of Consulting Engineers, the Consulting Engineer Council, the American Society for Testing and Materials, and the American Council of Independent Laboratories. Mr. Walker is also a member of the President's Advisory Council for Montana State University.

B. MONTANA UNIVERSITY TECHNICAL SERVICES COUNCIL

1. STATEMENT ON THE COUNCIL

Item 198-002. Establishment of the Montana University Technical Services Council

THAT, The State Board of Education, ex officio Regents of the Montana University System, approves the establishing of the Montana University Technical Services Council, to implement the program of the State Technical Services Act of 1965 (P.L. 89-182). Its general purpose will be to encourage and develop economic growth throughout the State of Montana through the wider diffusion and more effective application of science and technology to commerce and industry. The program of the Council will be developed cooperatively by the University of Montana, Montana State University, and Montana College of Mineral Science and Technology. The Council headquarters will be located in the Bureau of Business and Economic Research at the University of Montana in Missoula. The policy of the Council will be to promote the economy of Montana and, to that end, it will review program proposals submitted to it, approving those it considers worthy.

a. Statement of Purpose and Policy

With the recognized potential for growth because of geographical location, natural resources, and general western environment, it is obvious that reasonable steps be taken to improve the economy and industrial development of Montana. A Technical Services Council is hereby organized for these purposes through cooperative effort of the University of Montana, Montana State University, and Montana College of Mineral Science and Technology.

b. Functions

The Montana University Technical Services Council shall carry on such activities as it deems consistent with the purposes and policies of the State Technical Services Act of 1965, Public Law 89-182, passed by the 89th Congress on September 14, 1965. The Council shall advise the designated agency (University of Montana) in the creation of the five-year plan and the annual technical services program as required under the State Technical Services Act. The Council shall evaluate proposals and make recommendations of specific projects for inclusion in the one-year programs. It shall serve as liaison between the three institutions and local, state, and federal government agencies, and advise the presidents of the cooperating institutions concerning its activities.

c. Organization

(1) Director

To fulfill a requirement of the State Technical Services Act of 1965, the Governor of the State of Montana has named the University of Montana as the designated agency. That institution shall also serve as financial Agent to the Council. The President of the University of Montana has designated Patricia P. Bragg of the Bureau of Business and Economic Research as the Director of the Montana University Technical Services Council. The Director will function as staff executive officer

to the Council in carrying out its activities and will be responsible to the President. The Director shall prepare such reports as may be required to satisfy the agencies involved in any particular program.

(2) The Council

The Council initially shall consist of four members--one from each of the three units of the University System mentioned above, and the Director. The Director shall serve as secretary at meetings of the Council and shall vote only in the event of a tie. The program of the Council shall be to review the project proposals submitted by the three units of the University System named above, or by other agencies, and to recommend to the designated agency approval or rejection as suitable undertakings under the Act. The Council shall elect its own chairman, who shall serve one year. The chairmanship shall thereafter rotate among the above mentioned three units of the University System. The Council shall meet at least four times a year at locations specified by mutual agreement of its members. The Council may meet at any time at the request of the Director or two of the three member institutions. Minutes of all meetings shall be kept.

(3) Advisory Council

The Council shall recommend to the Director names of outstanding individuals in education, government, industry and professional fields to serve on advisory boards as desired or required in connection with federal programs such as those of the State Technical Services Act.

2. COUNCIL MEMBERS

At present the Council is made up of the following members (see the original Five Year Plan for biographical material on the Council members):

a. Patricia P. Bragg	Research Associate, Bureau of Business and Economic Research, University of Montana Director, State Technical Services in Montana, Staff Executive Officer to the Council
b. (Mrs.) Maxine C. Johnson	Assistant Director, Bureau of Business and Economic Research, University of Montana
c. Uuno M. Sahinen	Associate Director, Montana Bureau of Mines and Geology, Montana College of Mineral Science and Technology Chairman of the Council
d. Donald K. Weaver	Director of Engineering, Experiment Station, Montana State University

III. GOVERNOR'S CERTIFICATION

The revised Five Year Plan submitted by the Designated Agency, the Bureau of Business and Economic Research, University of Montana, is consistent with the policies and objectives of the State of Montana.

The Honorable Tim Babcock
Governor
State of Montana

IV. INTRODUCTION

Montana, the fourth largest state, is located in the Pacific Northwest, and is bounded on the east by North Dakota and South Dakota, on the south by Wyoming, on the west by Idaho, and on the north by the three Canadian provinces of British Columbia, Alberta, and Saskatchewan. The state's 147,138 square miles are divided into fifty-six counties which range in size from 5,580 square miles (Beaverhead) to 716 square miles (Silver Bow).

Montana has within its borders portions of three major drainage systems. West of the Continental Divide the streams drain via the Columbia River into the Pacific Ocean; east of the Divide the streams drain via the Missouri-Mississippi Rivers into the Gulf of Mexico; and from portions of Glacier National Park and Teton County streams drain via the Belly and St. Mary's Rivers into Hudson Bay.

Montana's large area and great differences in elevation result in a highly diverse climate. West of the Divide the climate is of a semi-marine, or North Pacific Coast type while to the east the continental type prevails. While the lowest temperature (-70° F.) recorded in the United States occurred in Montana, temperatures in excess of 100° F. have also been recorded at most of Montana's meteorological stations.

One-fourth of Montana's area is forest land, constituting about 3.5 percent of the total such land in the United States. Only five other states have a larger forest

area. Thirteen million acres of Montana's forests lie west of the Continental Divide, and nine million acres are in eastern Montana. There are eleven national forests in Montana with a total area of approximately 26,000 square miles.

Although Montana is one of the largest states in the nation, it is also one of the least populated. Its population both in 1950 (591,024) and in 1960 (674,767) accounted for less than 0.4 percent of total population in the United States for those years. In 1960, Montana had 4.6 persons per square mile, compared to 60.1 persons per square mile for the nation. Fifty-two percent of Montana's population in 1960 consisted of persons in the two age groups "under 21" and "over 65". Half of the state's population is rural, and only five urban areas--Billings, Butte, Great Falls, Helena, and Missoula--accounted for over one-fourth of the state's total population in 1960.

V. MAJOR REGIONAL AND INDUSTRIAL PROBLEMS

The desirability of programs to provide Montana businessmen with information which may help them to operate more efficiently and to discover new economic opportunities is easily documented. Although both 1964 and 1965 were years of unprecedented prosperity in Montana, as elsewhere in the nation, over a longer period of time Montana's economic growth has been somewhat slower than that of the United States as a whole. Table I, which compares changes in personal income in the two areas since 1950, makes this point.

Montanans are particularly interested in speeding up the growth of their private nonfarm economy. If the state is to continue to progress, it is important that the expansion of private nonagricultural business and industry be accelerated. Montana is no longer a predominantly agricultural state; in 1960 only 15.6 percent of its population lived on farms and ranches. And, although total agricultural income has fallen more sharply in the state than in the nation, the decline in agricultural employment has kept the per capita income of Montana farmers and ranchers considerably higher than in most states. Although the long-run outlook for Montana agriculture is good, it is likely that the farm population will continue to decline and that many rural people will seek jobs in Montana's cities. For these reasons, more and more interest is being focused on ways of expanding private nonfarm activities in Montana.

Table I

1950-1960 and 1960-1965

Personal Income Growth in Montana and the United States

Source	Montana Personal Income ($million)			Percent Change 1950-1960		Percent Change 1960-1965	
	1950	1960	1965	Mont.	U.S.	Mont.	U.S.
Total Personal Income	957	1,363	1,714	42.4	77.0	25.8	33.4
Wages and salaries	479	788	1,004	64.5	85.4	27.4	32.1
Farm	33	31	29	-6.1	9.2	-6.5	-9.2
Nonfarm	446	757	975	69.7	86.9	28.8	32.5
Private nonfarm	363	568	701	56.5	80.9	23.4	30.2
Government	83	189	274	127.7	122.0	45.0	43.6
Other labor income	11	32	47	190.1	187.6	46.9	68.6
Proprietors' income	329	280	323	-14.9	27.9	15.4	20.6
Farm	228	152	181	-33.3	-9.4	19.1	25.4
Nonfarm	101	128	142	26.7	49.6	10.9	18.9
Property income	95	182	244	91.6	85.3	34.1	44.8
Transfer payments	54	112	142	107.4	96.9	26.8	34.7
Less: Personal contributions for social security	12	31	47	---	---	51.6	---
Per capita income (dollars)	1,614	2,007	2,438	24.3	49.3	21.5	23.9

Source: U.S. Department of Commerce, Office of Business Economics

There are a number of reasons for Montana's relatively slower rate of economic growth since 1950. Among them are the state's dependence upon natural resources for its industrial base; technological changes which have reduced employment in several of its major industries; its small population, and its distance from major markets. Other factors, which are less easily documented, may also be involved. These include periodic shortages of investment capital and a need on the part of some businessmen for information about modern management practices. Per earnings of employed persons in Montana are generally below the national average. This is caused partly by seasonality of employment and partly by lower rates of pay.

Traditionally, Montana has been dependent upon three basic industries: agriculture, metal mining and refining, and wood products. In response to technological changes, employment in two of these industries, agriculture and metal mining and refining, was reduced by approximately 18,000 between 1950 and 1960 (Table II). At the same time, railroad employment declined by approximately 4,000, again in response to technological changes. When these losses are related to a total civilian labor force of only 248,000 (in 1960), their seriousness is apparent. The effects on Butte and Anaconda, where mining and smelting activities are concentrated, on railroad division points and on many small towns serving the farm population were especially severe.

Significant increases in employment between 1950 and 1960 occurred in retail trade, the finance and the service industries, and state and local governments. The

Table II

Changes in Montana's Employed Labor Force, 1950, 1960, and 1966

Industry group	April 1, 1950	April 1, 1960	April 15, 1966	Percent Change 1950-60	Percent Change 1960-66
Total employment	218,180	231,270	245,200	6.0	6.0
Agriculture	54,913	40,844	34,700	-25.6	-15.0
Nonagricultural industries	163,267	190,426	210,500	16.6	10.5
Mining	9,301	6,782	NA	-27.1	NA
Construction	14,772	14,911	NA	0.9	NA
Manufacturing	18,681	23,439	NA	25.5	NA
Transportation, communication, and other utilities	22,765	21,013	NA	-7.7	NA
Wholesale and retail trade	41,414	47,094	NA	13.7	NA
Finance, insurance, and real estate	5,006	8,035	NA	60.5	NA
Services	37,593	51,451	NA	36.9	NA
Public administration	10,101	12,590	NA	24.6	NA
Industry not reported	3,634	5,111	NA	40.6	NA

Source: 1950 and 1960, Bureau of the Census, 1960 Census of Population, Montana. Unemployment Compensation Commission of Montana, Montana Civilian Work Force, 1966.

net result, however, was a gain of only 6 percent in the employed labor force between 1950 and 1960. Nationally, the increase amounted to 12 percent. Between 1960 and 1966, Montana's employed labor force is estimated to have increased about 6 percent, while the gain in total employment in the U.S. approached 12 percent.

Table III compares annual rates of change in total employment in Montana and the United States between 1950 and 1960 and presents projected annual rates of change between 1960 and 1975. The projections, published by the Upper Midwest Economic Study, are based on the data for 1950-1960 and on national and state projections made by the National Planning Association. It is clear from these projections that Montana needs new sources of employment. The need will become greater as more technological changes occur, and further changes must take place if Montana industry is to continue to compete in national and world markets. The wood products industry offers a good example. Lumber is still the major product of the state's forest industry. Many mills are old and small; modernization is necessary if Montana producers are to remain competitive with other areas. This could mean less employment in lumber production, since the industry presently is pushing the limits of annual allowable cut on national forest lands, source of most of its raw material. Diversification of the industry into such products as pulp and paper (there is now one pulp and paper mill in the state) and hardboard and particle board is necessary if resources are to be fully utilized and industry employment maintained or increased.

Table III

Average Rates of Employment Change over the Periods
1950-1960 and 1960-1975, Montana and the United States
(average percentages per year)

Industry Group	United States	Montana
(1950-60)		
Total	1.09	-.25
Agriculture	-4.89	-3.14
Mining and oil	-2.24	-3.75
Manufacturing	0.93	0.90
Railroads	-4.51	-4.31
Transportation, communication, and utilities (except railroads)	1.56	1.63
Wholesale trade	1.65	1.90
Retail trade	1.37	0.60
Finance, insurance, and real estate	3.06	4.73
Service and miscellaneous	2.88	2.21
Construction	1.72	1.56
Federal government	1.44	1.56
State and local government	4.17	3.68
(1960-75 Projection)		
Total	1.88	0.87
Agriculture	-1.41	-1.66
Mining and oil	0.82	-0.32
Manufacturing	1.53	0.77
Railroads	-2.44	-1.77
Transportation, communication, and utilities (except railroads)	1.96	1.39
Wholesale trade	1.76	0.98
Retail trade	2.41	0.81
Finance, insurance, and real estate	2.50	1.81
Service and miscellaneous	3.19	1.88
Construction	2.88	1.35
Federal government	0.08	1.51
State and local government	2.13	2.45

Source: Upper Midwest Economic Study and state employment security agencies. (Henderson and Krueger, National Growth and Economic Change in the Upper Midwest, University of Minnesota Press, 1965, Table 2-2, page 24.)

Many economic activities, unless the products are truly unique, must be ruled out for Montana because of the small population of the state and the distance to larger markets. One group of businesses which may experience considerable expansion in the future is that serving the growing travel and recreation market. Montana offers year-round recreation opportunities and the many firms catering to tourists and recreationists make up one of the largest groups of small businesses in the state. Like other small businessmen, operators in the travel industry need assistance in planning and development and instruction in techniques which will enable them to operate more profitably.

Such assistance has always been difficult for Montana businessmen to obtain. Most businesses in the state are very small and their operators frequently have neither the time nor the specialization necessary to acquire new technical information on their own. Some need assistance in basic techniques of management, personnel training, accounting, as well as technological information about new products and processes. Educational institutions qualified to provide such aid have been hampered by lack of funds and by the failure of some businessmen to recognize them as sources of information; public library facilities are limited, and few of them place any emphasis on materials for businessmen; there are no full-time management consulting firms in the state. In addition, basic information about the state and its economy is difficult to obtain. There is no central statistical agency and much of the data collected by state and local agencies is neither put in usable form nor published.

By making more information available, the University of Montana's Bureau of Business and Economic Research and the cooperating institutions are hopeful that Montana businessmen may find solutions to some of their problems.

VI. PRIORITY AREAS FOR TECHNICAL SERVICES

Since Montana does not have the resources necessary to attack all of the problem areas at once, some areas must be given priority during the five-year period. However, because industrial composition and technology are constantly changing, it seems appropriate to establish goals rather than particular activities which will receive priority. Thus, annual program elements and Special Merit proposals will be evaluated in terms of three long-range goals: (1) developing a balanced combination of field service, demonstration, educational and referral activities; (2) establishing broad industry representation under all types of programs and; (3) providing an efficient exchange of ideas, reference material, and technological applications among the educational institutions and industry in Montana and the Rocky Mountain States.

Montana submitted a Fiscal 1966 Annual Plan in a rather limited period of time. Particular types of activities, such as educational programs, can be developed in a relatively short period of time because selected audiences are easily defined and the necessary expertise is available within the university and business communities. As a result the Fiscal 1966 program was limited to educational activities. Though these types of activities are an important means of disseminating technological information to business and commerce,

they are not the only available means. In Fiscal 1967 two field service activities and one demonstration were also submitted and approved. The comparative success of the two existing field service activities suggests that additional field service activities will be developed for specific industries. Currently a portion of the second planning grant is being used to determine the feasibility of an additional field service activity and a referral center. The forest products industry, a major contributor to Montana's economy, and the growing retail trade industry are likely prospects for field service activities. Referral services will be coordinated through the Regional Technical Services Council and the Montana State Department of Planning and Economic Development.

The second goal, broad industry representation, received considerable emphasis in Fiscal 1968 and will continue to be a major determinant of project approval. Fiscal 1966 activities--classified by industry representation--were largely confined to forestry and engineering; the Fiscal 1967 plan was expanded to include the mining industry. The Fiscal 1968 Annual Plan represents the first attempt to service the informational needs of the growing industries of finance, retail trade and services. For example, the Seminar on Drug Selection by Computer will be directed toward the pharmaceutical industry and the Computer Technology Seminar will encompass retail trade. There are still other industrial groups whose informational requirements are as great as those now being assisted

by State Technical Services, such as the finance, wholesale trade and several manufacturing industries.

While existing projects will be continued as long as each successive phase of the project demonstrates an increasing level of technology, any proposal which will make State Technical Services available to the industries mentioned above will receive priority among new proposals. Specifically, program elements receiving approval in one fiscal year as continuing programs will not automatically receive priority in subsequent years. Rather each program element will be evaluated on the basis of its relative merit.

As Montana's State Technical Services program begins to mature the importance of the third goal becomes increasingly apparent. Problems of duplicating programs, of measuring and comparing industry's informational needs and of isolated technological applications tend to become more acute as the program progresses. Although technology is constantly changing and seemingly inexhaustible, the resources necessary to disseminate this information are not; they must, therefore, be utilized effectively. A statewide information system can be effective only if the participating institutions, the designated agencies and industry in Montana and the neighboring states establish a systematic communications network among themselves.

The first step in building an effective communications network is to

engage the support and participation of all qualified institutions within the state. Some qualified institutions have neither the available staff nor time to submit their own proposals. But active participation need not be limited to proposal submission and project direction. Contributing staff time and ideas to proposals submitted by other institutions is an equally important way to participate. In addition to granting priority to those proposals which utilize the expertise from more than one institution, Montana's University Technical Services Council will enlarge its membership to include one representative from each of the qualified but non-participating institutions to facilitate interaction among the university units. In brief, the continued growth and complexity of Montana's program requires that State Technical Services become, in fact, a statewide program rather than a conglomerate of individual university activities.

Developing a communications network which transcends state boundaries will also receive considerable attention throughout the five-year period. As a member of the Regional Technical Services Council, Montana has been working cooperatively with representatives from the seven other Rocky Mountain States to develop regional programs under the Act. Lateral communications among the designated agencies which outline those proposals being submitted, scheduled activities, and evaluation approaches and results will be further

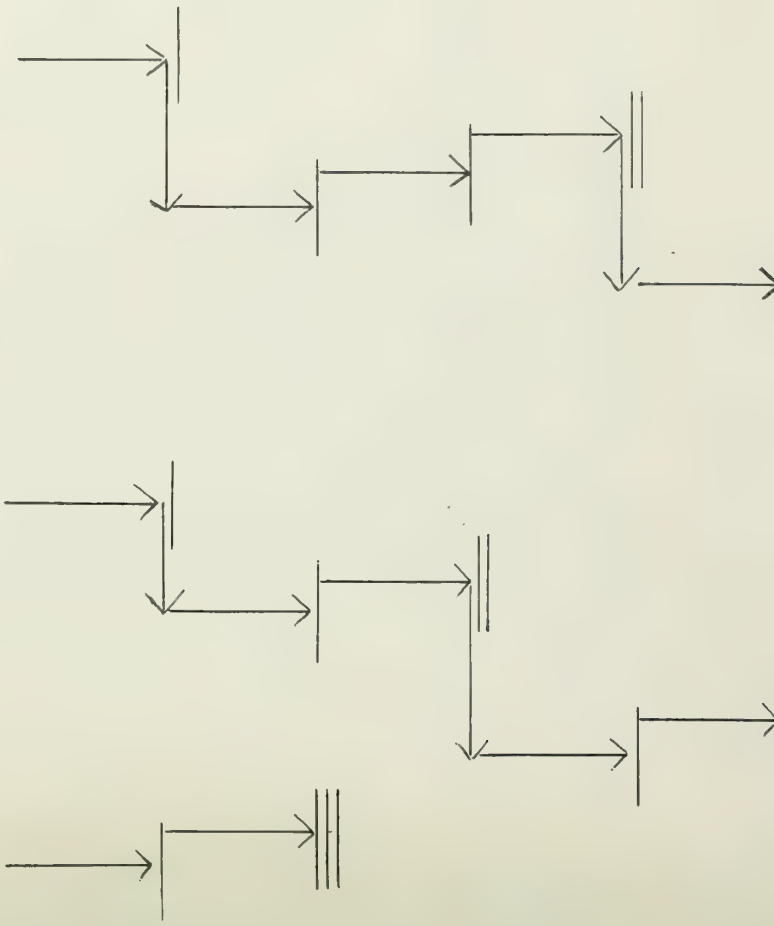
encouraged and coordinated through the Regional Technical Services Council.

The Bureau of Business and Economic Research, as the Designated Agency will measure the impact of the State Technical Services program on Montana's economy during the course of regular Bureau activities and as required for the annual report to be submitted to the Office of State Technical Services. In addition, the sponsor of each program element will evaluate the short-term benefits after the program is completed and report their findings to the Montana University Technical Services Council. A time-phase evaluation of current and anticipated State Technical Service programs is presented in Table IV.

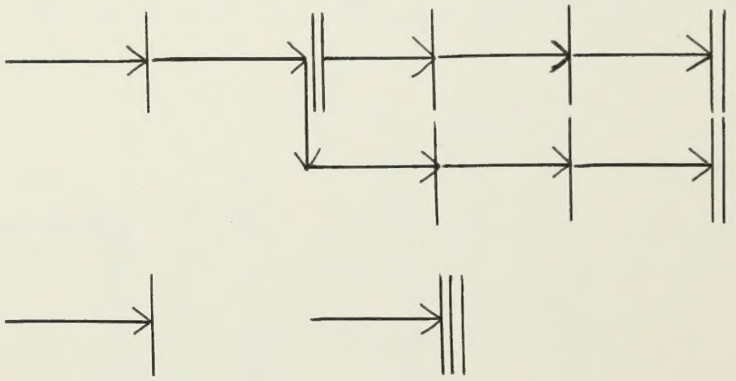
Table IV

State Technical Services
Time-Phase Evaluation

Project Title	Technology[1]	Industry Serviced[2]	Sponsoring Institution[3]	FY 1967[4]	FY 1968	FY 1969	FY 1970	FY 1971
Educational:								
Forest Mensuration Conference	1	F	M					
Forest Genetic & Silviculture Workshop	3 2 1	F	M					
Forest Resources Inventory Seminar	3	F	M					
Soil Technology Workshop	1	F	M					
Productive Capacity Technology	3 2	F	M					
Inventory Control Techniques	3 2	F	M					
Water & Waste Treatment Workshop	3 2	G	S					



Project Title	Technology[1]	Industry Serviced[2]	Sponsoring Institution[3]	FY 1967[4]	FY 1968	FY 1969	FY 1970	FY 1971
Referral Services:								
Research and Development Newsletter		G	S					
Information Services Center[5]		G	M,T,S					
Directory of Scientists & Engineers		G	T					



[1]Represents increasing levels of technology, "1" being the lowest and "3" the highest.

[2]F Forestry, G General, R Retail Trade, S Service industries, M Mining, MF Manufacturing

[3]M University of Montana
S Montana State University
T Montana Tech
G College of Great Falls

[4]A single vertical bar represents initial evaluation; a double bar represents major long-run evaluation; a triple bar represents major evaluation and alternative funding.

[5]In cooperation with the State Planning Board and possibly a Special Merit Proposal rather than an Annual Plan submission.